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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,767	08/10/2001	Dieter Berger	0147-0223P	4759
2292	7590	10/06/2003		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER BAUM, STUART F	
			ART UNIT 1638	PAPER NUMBER

DATE MAILED: 10/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,767

Applicant(s)

BERGER ET AL.

Examiner

Stuart F. Baum

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim objections

1. Claims 8 and 11 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n).

Election/Restrictions

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, 15-18, and 20-21 drawn to a recombinant DNA molecule comprising a nucleic acid molecule encoding a subtilisin-like serine protease; vector, host cell, transgenic plant and kit comprising said DNA molecule and a method for the production of transgenic plants having decreased water consumption.

Group II, claim(s) 1-10, 15-18, and 20-21 drawn to a recombinant DNA molecule comprising a nucleic acid molecule encoding a hyper-active mutant subtilisin-like serine protease; vector, host cell, transgenic plant and kit comprising said DNA molecule and a method for the production of transgenic plants having decreased water consumption.

Group III, claim(s) 1-7, 11-14, and 19 drawn to a recombinant DNA molecule comprising a nucleic acid molecule encoding a non-active mutant subtilisin-like serine protease; vector, host cell, transgenic plant comprising said DNA molecule and a method for the production of transgenic plants having increased yield and/or increased stomatal density.

Group IV, claim(s) 1-7, 11-14, and 19 drawn to a recombinant DNA molecule comprising a nucleic acid molecule encoding an antibody against the subtilisin-like serine protease; vector, host cell, transgenic plant and kit comprising said DNA molecule and a method for the production of transgenic plants having increased yield and/or increased stomatal density.

Group V, claim(s) 21, drawn to a use of a nucleic acid molecule that encodes or regulates the expression of a subtilisin-like serine protease.

3. Claims 1-21 will be examined to the extent that they read on the elected invention.
5. The claims are not linked by a single special technical feature because the invention of Group I does not constitute an advance over the prior art. Group I is taught by Jarai et al (1994, Gene 139(1):51-57) who teach a DNA sequence encoding a subtilisin-like protease from *Aspergillus*. Hence, there is no special technical feature that links the wild-type DNA sequence of Group I to the hyper-active mutant subtilisin-like serine protease of Group II or to the non-active mutant subtilisin-like serine protease of Group III or to the antibody against the subtilisin-like serine protease of Group IV or to the use of a nucleic acid molecule that encodes or regulates the expression of a subtilisin-like serine protease of Groups V.

Further, the wild-type subtilisin of Group I is not shared with the hyper-active mutant of Group II. The method for increasing expression of a subtilisin of Groups I and II are not shared with the method for decreasing expression of subtilisin of Groups III and IV. The non-active mutant of subtilisin of Group III is not shared with the antibody of Group IV. The regulation of expression of subtilisin of Group V is not shared with any of the other Groups.

Furthermore, Applicant is reminded that nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another, as are different proteins structurally distinct chemical compounds and unrelated to one another. These sequences are thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq (see MPEP 803.04 and 2434). This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

4. If Applicant elects Groups I-IV, Applicant is also to elect one nucleic acid sequence and one corresponding amino acid sequence from the list below:

SEQ ID NO:1,	SEQ ID NO:7,	SEQ ID NO:9,	SEQ ID NO:11
SEQ ID NO:2,	SEQ ID NO:8,	SEQ ID NO:10,	SEQ ID NO:12

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6. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification, and the literature and sequence searches required for each of the Groups are not required for another of the Groups, restriction for examination purposes as indicated is proper.
7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart F. Baum whose telephone number is 703-305-6997. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 703-306-3218. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Stuart F. Baum Ph.D.

September 29, 2003


ASHWIN D. MEHTA, PH.D.
PATENT EXAMINER